



SEP 16 10 10 AM '98

REPT

September 15, 1998

Mr. Robert Butler, Jr.
State of Vermont
Department of Environmental Conservation
Sites Management Section
103 South Main Street
Waterbury, VT 05671-0404

RE: Report on the Site Investigation at Armand Auto Sales, Route 7, Georgia, VT
(VTDEC Site #98-2364)

Dear Mr. Butler:

Enclosed please find Griffin's Site Investigation report for Armand Auto Sales on Route 7 in Georgia. Based on the results of this investigation, Griffin recommends no further action and we recommend that this site (#98-2364) be removed from the Vermont hazardous waste sites list.

If you have any questions or comments regarding the findings, conclusions, or recommendations in this report, please call.

Sincerely,

Kevin McGraw
Hydrogeologist

Enclosure

cc: GI Project #39841211

**REPORT ON THE
INVESTIGATION OF SUBSURFACE
PETROLEUM CONTAMINATION**

at
**ARMAND AUTO SALES
ROUTE 7
GEORGIA, VERMONT**

August 6, 1998

Prepared for:

Armand Gregoire
122 Swanton Road
St. Albans, VT 05478

Prepared by:



P.O. Box 943
Williston, Vermont 05495
(802) 865-4288

Griffin Project #: 39841211

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I. INTRODUCTION

This report summarizes the investigation of subsurface petroleum contamination at Armand Auto Sales located on Route 7 in Georgia, Vermont (see Site Location Map and Area Map, Appendix A). The following investigation has been conducted to define more clearly the degree and extent of petroleum contamination which was detected in the soils at this site during the removal of gasoline underground storage tanks (USTs) on April 1, 1998. Included in the report are the findings from the vibratory drilling along with the results of subsequent groundwater sampling conducted at the property. Griffin International, Inc. (Griffin) conducted the work at this site for Mr. Armand Gregoire in accordance with the work plan dated May 18, 1998.

II. HISTORICAL BACKGROUND

On April 1, 1998, three 1,000-gallon gasoline USTs were removed from the subsurface at the Armand Auto Sales property. These tanks had reportedly not been used for the past five years. These USTs were located near the center of the paved lot on the west side of the main building (see Site Map). The age of the tanks was estimated to be greater than 25 years.

Upon removal, the tanks were found to be in poor to fair condition. Volatile organic compounds (VOCs) were detected in the soils surrounding the tanks and petroleum odors were also observed. The water table was approximately three feet below grade at the time of the tank closure. Since soils at the water table were observed to be contaminated, all excavated soils were backfilled in the excavation. Griffin prepared a tank closure report which was submitted to the Vermont Department of Environmental Conservation (VTDEC) on April 2, 1998.

In response to the soil and presumed groundwater contamination detected during the removal of the USTs, the VTDEC requested a site investigation to determine the degree and extent of contamination and to assess the potential for contaminant impact on sensitive receptors in the area. Griffin submitted a work plan dated May 18, 1998, to the VTDEC on behalf of Mr. Gregoire. The following report presents the findings from Griffin's Site Investigation conducted in June, 1998.

III. SITE DESCRIPTION

Armand Auto Sales is located on the eastern fringe of the Champlain Valley between Route 89 and Route 7. The nearest surface water appears to be an intermittent stream located approximately 1,000 feet south of the site. This stream feeds into Mill River which is located greater than one mile west-southwest of the site. West of the site, local terrain slopes downward gently to the west and southwest. East of the site, the land slopes steeply up St. Albans Hill (see Site Location Map). Based on surface topography,

groundwater flow beneath the site was estimated to be to the west or southwest. The elevation of the site is approximately 420 feet above mean sea level.

The area surrounding the site consists of a mix of commercial, residential, and agricultural uses. The area, including Armand Auto Sales, is served by private drinking water wells. The nearest supply well is located onsite approximately 95 feet topographically uphill from the former UST area. This well is reportedly a bedrock well greater than 200 feet deep. The neighboring business to the south and the farm residence across Route 7 also likely obtain their water from drilled bedrock wells based on visual observations and according to Mr. Gregoire.

The Surficial Geologic Map of Vermont maps the surrounding area as beach gravel. Actual subsurface materials vary from sand and gravel to dense glacial till.

IV. SUBSURFACE INVESTIGATION

On June 9, 1998, four monitoring wells were installed by Adams Engineering using a truck-mounted vibratory drill rig. The monitoring wells, designated MW-1 through MW-4, were installed to help define the degree and extent of petroleum contamination in the vicinity of the former gasoline USTs. MW-1 was installed between the main onsite building and the former UST area in the assumed upgradient direction from the former tank area. The boring for MW-2 was drilled on the north side of the former tank pit. MW-3 and MW-4 were installed in presumed downgradient directions from the former tank pit area. The locations of the wells are shown on the Site Map in Appendix A.

Continuous, five-foot, soil core samples were obtained in each boring. Soil samples were screened for VOCs using an HNU (Model PI-101) photoionization device. In addition, soil characteristics were recorded in detailed boring logs by the supervising Griffin hydrogeologist.

In the boring for MW-1, sand and gravel were observed from grade to 7.1 feet below grade. The drill rig could not advance the boring deeper than this due to the presence of dense glacial till which was encountered at that depth. Groundwater was encountered at approximately six feet below grade. Petroleum odors were not observed in the soil samples from this boring; no elevated PID readings were measured in these soils.

Soils retrieved from the boring for MW-2 consisted of sand and gravel to approximately 5 feet below grade. Layers of medium sand, fine sand and silt, and sandy clay were observed from 5 to 10 feet below grade. Groundwater was encountered at approximately 5 feet below grade. Petroleum odors were not observed in any of the soil samples collected from this boring.

In the boring for MW-3, sand and gravel were observed from grade to 8 feet below grade. Glacial till was encountered at 8 feet below grade, preventing further advancement of the

boring. Groundwater was again encountered at approximately 5 feet below grade. A petroleum odor was observed in the soil collected from 5 to 8 feet below grade; a PID reading of 180 parts per million (ppm) was measured in this sample.

Soils retrieved from the boring for MW-4 consisted of silt, fine to coarse sand, and gravel from grade to 7 feet below grade. Dense sandy clay with some gravel was observed from 7 to 12.5 feet below grade. Groundwater was encountered at approximately 5 feet below grade. Petroleum odors were observed in the soils from 5 to 7 feet below grade. A maximum PID reading of 54 ppm was recorded for a soil sample collected from 6 to 7 feet below grade.

The screens in MW-1, MW-2, MW-3, and MW-4 are set from 2' to 7.1', 2' to 10', 2' to 8', and 2' to 9', respectively. The monitoring wells were constructed with 1.5-inch diameter, Schedule 40 PVC riser and 0.010" slotted screen. A silica sand pack was placed around the screened portion of each well and a bentonite seal was placed in the annulus immediately above the sand pack. To complete the construction of each well, a road box was set in concrete at grade level. In addition, a locking well cap was placed on each monitoring well. The boring logs and well construction details for these wells are included in Appendix B.

V. WATER LEVELS AND WATER QUALITY

A. Water Table Elevations

Water table elevation measurements were collected from MW-1 through MW-4 on June 16, 1998. In addition, the monitoring wells were surveyed in azimuth and elevation relative to the top-of-casing of MW-2 which has been assigned an arbitrary elevation of 100.00 feet. Liquid level monitoring data are presented in Appendix C.

Water table elevations have been plotted and contoured to illustrate the estimated gradient and direction of groundwater flow beneath the site (see Groundwater Contour Map, Appendix A). According to these data, groundwater is flowing to the southwest at a hydraulic gradient of 0.025. Under this flow regime, wells MW-3 and MW-4 are directly downgradient of the former gasoline tank locations. ✓

B. Water Quality

Griffin collected groundwater samples at the site from all four monitoring wells and the onsite drinking water supply well. The groundwater samples were analyzed for petroleum compounds by EPA Method 602. The analytical results have been plotted to show the distribution of dissolved contamination across the site (see Contaminant Concentration Map, Appendix A).

Very low concentrations of toluene, ethylbenzene and xylenes were detected in downgradient well MW-4. Very low concentrations of ethylbenzene and xylenes were detected in downgradient monitoring well MW-3. The Vermont Groundwater Enforcement Standards (VGESs) for these compounds were not exceeded in either sample. Benzene and methyl tert-butyl ether (MTBE) were not detected in any of the groundwater samples. Dissolved contamination was not detected in the samples collected from MW-1, MW-2, or the onsite supply well. A groundwater quality summary for this sampling event is presented in Appendix D. The Endyne laboratory report is also included in this appendix.

The trip blank and duplicate sample analytical results indicate that proper quality assurance and quality control were maintained during the sampling and analysis.

VI. RECEPTOR RISK ASSESSMENT

A receptor risk assessment was conducted to identify known and potential receptors of the petroleum contamination detected at Armand Auto Sales. A visual survey was conducted at the time of monitoring well installation and during the UST closure inspection. A determination of the potential risk to identified receptors was conducted based on proximity, groundwater flow direction and gradient, and contaminant concentration levels.

Water Supplies

As outlined in Section III of this report, the area in the vicinity of the site is served by private drinking water supplies. The nearest supply well is located onsite, approximately 95 feet away from the former tank area. This water supply was sampled and analyzed for petroleum compounds due to its proximity to the former source area. Dissolved contamination was not detected in this sample. Based on the calculated groundwater flow direction away from the supply well, and the minimal dissolved contamination detected in the two downgradient monitoring wells, the risk to this supply well is considered negligible. ✓

In addition, the risk to other supply wells in the area is deemed to be minimal for the same reasons. There do not appear to be any supply wells located directly downgradient from the site. An open field (part of the neighboring farm) is situated directly downgradient from the site.

Buildings in the Vicinity

The onsite buildings and other buildings in the vicinity of the site do not appear to be at risk of vapor impact based on the measured groundwater flow direction and their location relative to the former source area. In addition, there are no basements in the onsite buildings. ✓

Surface Water

The nearest surface water to the site appears to be an intermittent stream located approximately 1,000 feet to the south. Based on the minimal dissolved contaminant levels in the groundwater and the relatively flat hydraulic gradient, the risk to this surface water is deemed to be negligible.

VII. CONCLUSIONS

Based on the investigation at this site, Griffin has reached the following conclusions:

1. In each of the four soil borings, sand and gravel was observed to be underlain by a dense glacial till. Adsorbed petroleum contamination was detected in the borings for MW-3 and MW-4.
2. On June 16, 1998, the water table elevation beneath the site ranged from approximately 5 to 6 feet below grade. Based on the water table elevation data collected for this date, groundwater beneath the site is flowing southwest at a hydraulic gradient of 0.025.
3. Trace levels of toluene, ethylbenzene, and xylenes were detected in the groundwater samples collected from downgradient monitoring wells MW-3 and MW-4. The VGES for BTEX and MTBE were not exceeded in any of the groundwater samples collected at the site.
4. Dissolved contamination was not detected in the water sample collected from the onsite supply well.
5. The risk assessment for this site has determined that there is likely little threat to any of the drinking water supplies in the area from residual gasoline contamination associated with the three former gasoline tanks at the site. In addition, the subsurface petroleum contamination does not likely pose a risk to the indoor air quality of nearby buildings or the nearest surface water.

VIII. RECOMMENDATIONS

Based on the above conclusions, Griffin does not recommend any further investigation or groundwater monitoring at Armand Auto Sales. Furthermore, this site should be removed from the VTDEC hazardous waste sites list.

APPENDICES

APPENDIX A

Maps

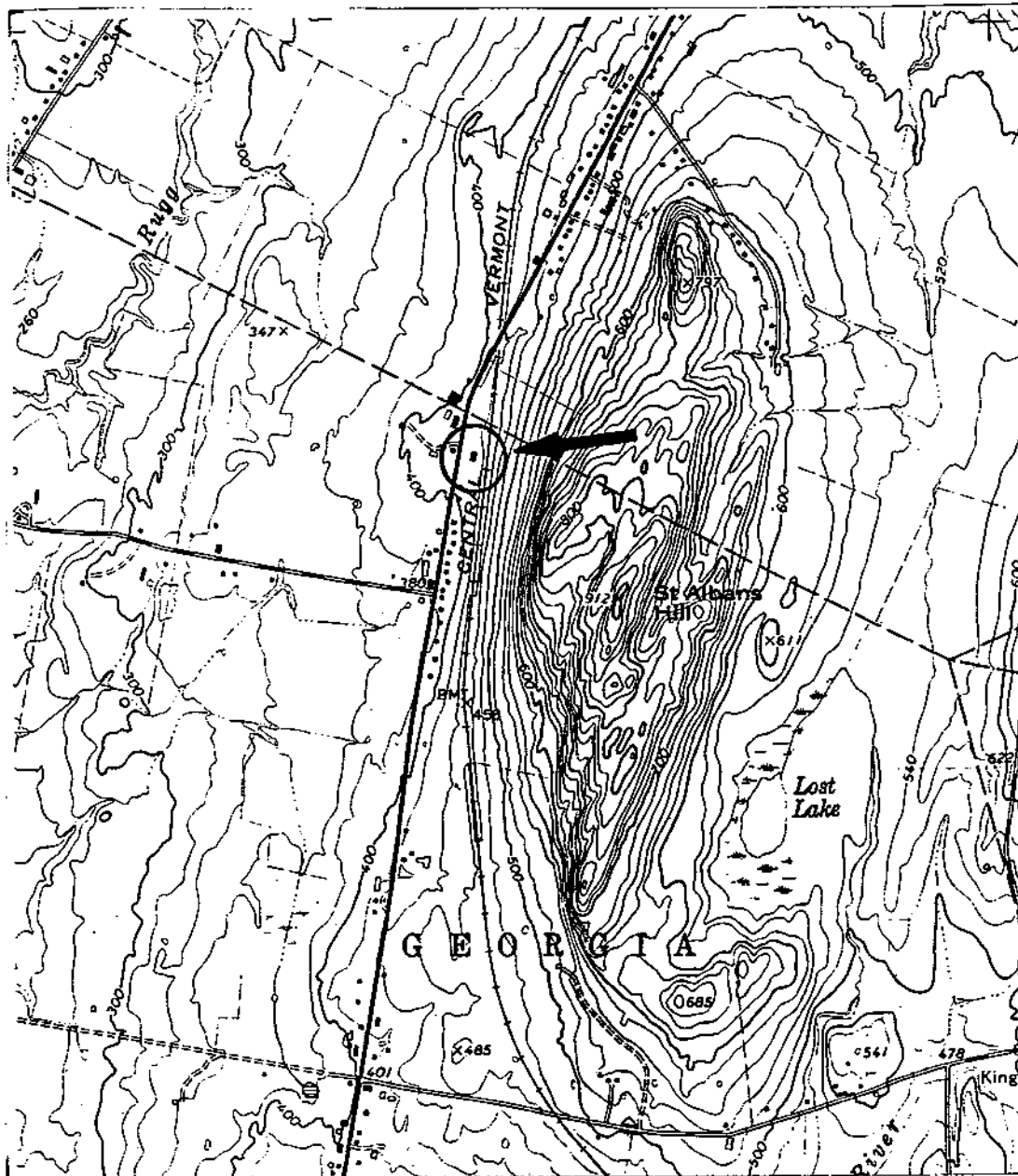
Site Location Map

Area Map

Site Map

Groundwater Contour Map

Contaminant Concentration Map



JOB #: 39841211
 VDEC SITE #98-2384
 SOURCE: USGS- MILTON, VERMONT QUADRANGLE



ARMAND AUTO SALES

GEORGIA, VERMONT

SITE LOCATION MAP

DATE: 6/9/98

DWG. #:1

SCALE: 1:24000

DRN.:SB

APP.:KM



RESIDENCE

⊕ SW2

RESIDENCE

BARN

LAWN

OPEN FIELD

ROUTE 7

OPEN FIELD

CARWASH

MW2

MW1

MW4

MW3

PAVEMENT

FORMER TANK PIT
LOCATION

LAWN

ARMAND
AUTO
SALES

⊕ SW1

DRAINAGE DITCH

AUTO BODY
SHOP

CENTRAL VERMONT RAILROAD

JOB #: 39841211



ARMAND AUTO SALES

GEORGIA, VERMONT

AREA MAP

DATE: 6/10/98

DWG.#:2

SCALE: NONE

DRN.:SB

APP.:KM



RESIDENCE

ROUTE 7

MW3
GRASSED
AREA

OPEN FIELD

CARWASH

PAVEMENT

LAWN

ARMAND
AUTO
SALES

CENTRAL VERMONT RAILROAD

MW2

MW1

MW4

SW1

FORMER LOCATION OF
(3) 1000 GALLON
GASOLINE USTs REMOVED
APRIL 1, 1998.

LEGEND

- MW2 MONITORING WELL
- SW1 SUPPLY WELL

JOB #: 39841211



ARMAND AUTO SALES

GEORGIA, VERMONT

SITE MAP

DATE: 6/9/98	DWG.#:3	SCALE: 1"=40'	DRN.:SB	APP.:KM
--------------	---------	---------------	---------	---------



RESIDENCE

ROUTE 7

OPEN FIELD

CARWASH

PAVEMENT

LAWN

MW2
94.75'

FORMER TANK PIT
LOCATION

MW1
94.84'

MW3
93.98'
GRASSED
AREA

APPROX. DIRECTION OF
GROUNDWATER FLOW

MW4
93.74'

ARMAND
AUTO
SALES

SW1

FORMER LOCATION OF
(3) 1000 GALLON
GASOLINE USTs REMOVED
APRIL 1, 1998.

LEGEND

MW2 MONITORING WELL AND WATER
94.75' TABLE ELEVATION IN FEET

94.0' GROUNDWATER CONTOUR IN FEET
(DASHED WHERE INFERRED)

SW1 SUPPLY WELL

JOB #: 39841211



ARMAND AUTO SALES

GEORGIA, VERMONT

GROUNDWATER CONTOUR MAP
MEASUREMENT DATE: 6/16/98

DATE: 8/6/98

DWG.#:4

SCALE: 1"=40'

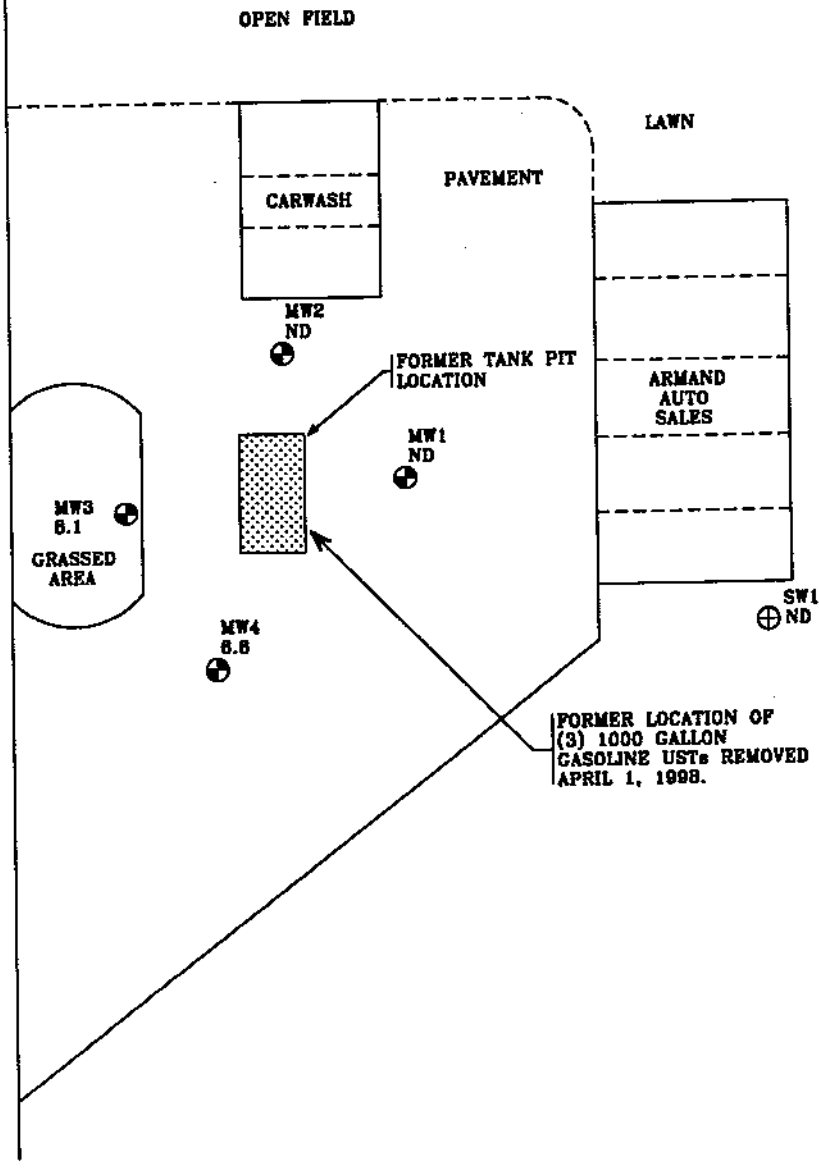
DRN.:SB

APP.:KM



RESIDENCE

ROUTE 7



CENTRAL VERMONT RAILROAD

LEGEND

- MW3 6.1 MONITORING WELL AND TOTAL BTEX AND MTBE CONCENTRATION (ppb)
⊕ SW1 SUPPLY WELL

JOB #: 39841211



ARMAND AUTO SALES

GEORGIA, VERMONT

CONTAMINANT CONCENTRATION MAP
SAMPLE DATE: 6/16/98

DATE: 8/6/98

DWG.#:5

SCALE: 1"=40'

DRN.:SB

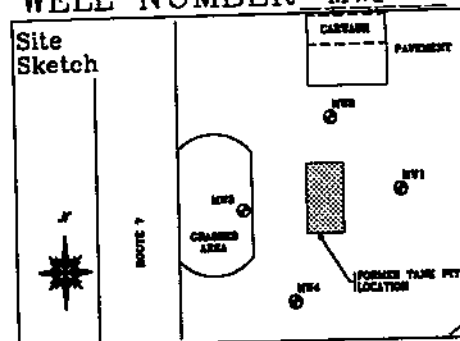
APP.:KM

APPENDIX B

Well Logs

PROJECT ARMAND AUTO SALES
 LOCATION GEORGIA, VERMONT
 DATE DRILLED 6/9/98 TOTAL DEPTH OF HOLE 7.4'
 DIAMETER 2.75"
 SCREEN DIA. 1.5" LENGTH 5.0' SLOT SIZE 0.010"
 CASING DIA. 1.5" LENGTH 1.5' TYPE sch 40 pvc
 DRILLING CO. ADAMS ENGR. DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY K. McGRAW

WELL NUMBER MW1

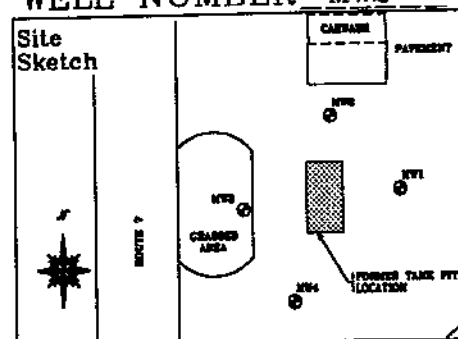


GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0	ROAD BOX	LOCKING WELL CAP		Asphalt	0
1	CONCRETE NATIVE BACKFILL		0.5'-3' 0.4 ppm	Orangish brown, fine to medium SAND, some gravel, dry, no odor.	1
2	BENTONITE WELL RISER				2
3	SAND PACK		3'-5' 0.4 ppm	Brown, medium to coarse SAND, little gravel, dry, no odor.	3
4	WELL SCREEN				4
5					5
6	BOTTOM CAP		5'-7.1' 0.2 ppm	6.0' WATER TABLE Brown, medium SAND to gravel, wet at 6.0', no odor.	6
7	DENSE TILL			BASE OF WELL AT 7.1' REFUSAL AT 7.1'	7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					24
25					25

PROJECT ARMAND AUTO SALES
 LOCATION GEORGIA, VERMONT
 DATE DRILLED 6/9/98 TOTAL DEPTH OF HOLE 10.0'
 DIAMETER 2.75"
 SCREEN DIA. 1.5" LENGTH 8.0' SLOT SIZE 0.010"
 CASING DIA. 1.5" LENGTH 1.5' TYPE sch 40 pvc
 DRILLING CO. ADAMS ENGR DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY K. McGRAW

WELL NUMBER MW2

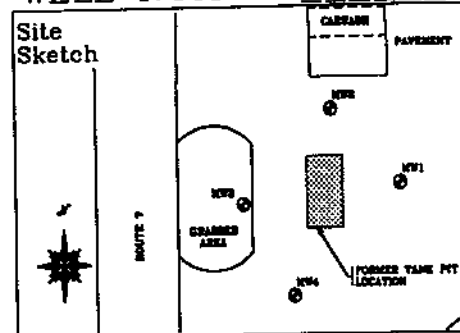


GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0	ROAD BOX	LOCKING WELL CAP		Asphalt	0
1	CONCRETE		0.5'-1.5' 0.3 ppm	Dark brown fine SAND and fine gravel, little silt, dry, no odor.	1
2	BENTONITE				2
3	WELL RISER		1.5'-5.0' 0.3 ppm	Brown, fine to coarse SAND, some gravel, damp, no odor.	3
4					4
5	SAND PACK			5.0' WATER TABLE	5
6			6'-6.5' 0.3 ppm	Same as above, wet at 5.0'. Brown, well sorted, medium SAND, wet no odor.	6
7	WELL SCREEN			Brown, fine SAND and SILT, little gravel, wet.	7
8					8
9	BOTTOM CAP		7.5'-10' 0.6 ppm	Gray, sandy CLAY, little gravel, wet, no odor.	9
10	UNDISTURBED NATIVE SOIL			BASE OF WELL AT 10.0' END OF EXPLORATION AT 10.0'	10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					24
25					25

PROJECT ARMAND AUTO SALES
 LOCATION GEORGIA, VERMONT
 DATE DRILLED 6/9/98 TOTAL DEPTH OF HOLE 8.0'
 DIAMETER 2.75"
 SCREEN DIA. 1.5" LENGTH 6.0' SLOT SIZE 0.010"
 CASING DIA. 1.5" LENGTH 1.5' TYPE sch 40 pvc
 DRILLING CO. ADAMS ENGR. DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY K. McGRAW

WELL NUMBER MW3

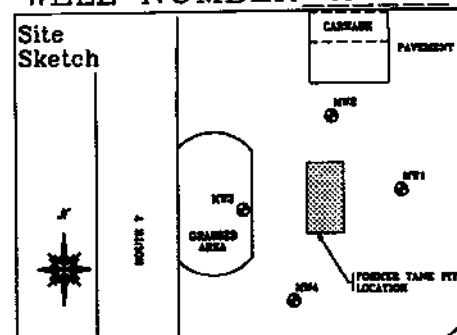


GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0	ROAD BOX	LOCKING WELL CAP		Asphalt	0
1	CONCRETE		0.5'-2'	Brown SILT, coarse SAND, some fine gravel, dense, damp, no odor.	1
2	BENTONITE		0 ppm		2
3	WELL RISER		2'-5'	Brown, fine to coarse SAND, some fine gravel, little silt, damp, no odor.	3
4	SAND PACK		0.3 ppm		4
5	WELL SCREEN			5.0' WATER TABLE	5
6	BOTTOM CAP		5'-8'	Brown, poorly sorted SAND and GRAVEL, wet, odor.	6
7	DENSE TILL		180 ppm		7
8				BASE OF WELL AT 8.0'	8
9				REFUSAL AT 8.0'	9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					24
25					25

PROJECT ARMAND AUTO SALES
 LOCATION GEORGIA, VERMONT
 DATE DRILLED 6/9/98 TOTAL DEPTH OF HOLE 12.5'
 DIAMETER 2.75"
 SCREEN DIA. 1.5" LENGTH 7.0' SLOT SIZE 0.010"
 CASING DIA. 1.5" LENGTH 1.7' TYPE sch 40 pvc
 DRILLING CO. ADAMS ENGR. DRILLING METHOD VIBRATORY
 DRILLER GERRY ADAMS LOG BY K. McGRAW

WELL NUMBER MW4



GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0		ROAD BOX		Asphalt	0
1		LOCKING WELL CAP		Brown SILT, some fine gravel, little sand, damp, no odor.	1
2		CONCRETE	0.5'-2' 0.3 ppm		2
3		BENTONITE		Brown, fine to coarse SAND, little gravel, damp, no odor.	3
4		WELL RISER	2'-5' 0.3 ppm		4
5		SAND PACK		5.0' WATER TABLE	5
6		WELL SCREEN	5'-6' 30 ppm	Brown, fine to coarse SAND, some gravel, little silt, wet, odor.	6
7		BOTTOM CAP	8'-7' 54 ppm	Same as above.	7
8			7'-10' 0.8 ppm	Gray, sandy CLAY, some gravel, dense, wet, no odor.	8
9					9
10		NATIVE BACKFILL	10'-12.5' 0.5 ppm	Same as above, very dense, wet, no odor.	10
11					11
12		DENSE TILL		BASE OF WELL AT 12.5' REFUSAL AT 12.5'	12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					24
25					25

APPENDIX C

Liquid Level Monitoring Data

Liquid Level Monitoring Data
Armand Auto Sales, Georgia, Vermont

6/16/98

Well I.D.	Top of Casing Elevation	Depth To Product	Depth To Water	Product Thickness	Specific Gravity Of Product	Water Equivalent	Corrected Depth To Water	Corrected Water Table Elevation
MW-1	99.97		5.13					94.84
MW-2	100.00		5.25					94.75
MW-3	98.90		4.92					93.98
MW-4	98.27		4.53					93.74

All Values Reported in Feet

Top-of-Casing Elevations Measured in Feet Relative to MW-2 set at 100.00'

APPENDIX D

Groundwater Quality Summary

Laboratory Report

**Groundwater Quality Summary
Armand Auto Sales
Georgia, Vermont**

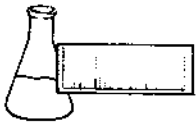
June 16, 1998

PARAMETER	Sample Point							VGES
	MW-1	MW-2	MW-3	MW-4	Supply Well	Duplicate of MW-2	Trip Blank	
Benzene	ND	ND	ND	ND	ND	ND	ND	5.
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	100.
1,2-DCB	ND	ND	ND	ND	ND	ND	ND	600.
1,3-DCB	ND	ND	ND	ND	ND	ND	ND	600.
1,4-DCB	ND	ND	ND	ND	ND	ND	ND	75.
Ethylbenzene	ND	ND	6.0	3.6	ND	ND	ND	700.
Toluene	ND	ND	ND	1.8	ND	ND	ND	1,000.
Xylenes	ND	ND	2.1	1.2	ND	ND	ND	10,000.
Total BTEX	ND	ND	8.1	6.6	ND	ND	ND	-
MTBE	ND	ND	ND	ND	ND	ND	ND	40.
BTEX+MTBE	ND	ND	8.1	6.6	ND	ND	ND	-

All Values Reported in ug/L (ppb)

VGES - Vermont Groundwater Enforcement Standard

ND - None Detected



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International
PROJECT NAME: Armand Auto
REPORT DATE: June 24, 1998
DATE SAMPLED: June 16, 1998

PROJECT CODE: GIAA1252
REF.#: 122,766 - 122771A

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times. All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method. Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

enclosures

**ENDYNE, INC.****Laboratory Services**

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

EPA METHOD 602--PURGEABLE AROMATICS**CLIENT:** Griffin International**DATE RECEIVED:** June 17, 1998**PROJECT NAME:** Armand Auto**REPORT DATE:** June 24, 1998**CLIENT PROJ. #:** 39841211**PROJECT CODE:** GIAA1252

Ref. #:	122,766	122,767	122,768	122,769	122,770
Site:	Trip Blank	MW-4	MW-1	MW-2	Duplicate (MW-2)
Date Sampled:	6/16/98	6/16/98	6/16/98	6/16/98	6/16/98
Time Sampled:	7:40	9:50	9:58	10:09	10:09
Sampler:	R. Basile	R. Basile	R. Basile	R. Basile	R. Basile
Date Analyzed:	6/22/98	6/22/98	6/22/98	6/22/98	6/23/98
UIP Count:	0	>10	>10	0	0
Dil. Factor (%):	100	100	100	100	100
Surr % Rec. (%):	103	99	90	95	93
Parameter	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)	Conc. (ug/L)
Benzene	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<1	<1
Ethylbenzene	<1	3.6	<1	<1	<1
Toluene	<1	1.8	<1	<1	<1
Xylenes	<1	1.2	<1	<1	<1
MTBE	<10	<10	<10	<10	<10

Ref. #:	122,771	122771A			
Site:	MW-3	Supply Well			
Date Sampled:	6/16/98	6/16/98			
Time Sampled:	10:28	9:10			
Sampler:	R. Basile	R. Basile			
Date Analyzed:	6/23/98	6/23/98			
UIP Count:	>10	0			
Dil. Factor (%):	100	100			
Surr % Rec. (%):	103	100			
Parameter	Conc. (ug/L)	Conc. (ug/L)			
Benzene	<1	<1			
Chlorobenzene	<1	<1			
1,2-Dichlorobenzene	<1	<1			
1,3-Dichlorobenzene	<1	<1			
1,4-Dichlorobenzene	<1	<1			
Ethylbenzene	6.0	<1			
Toluene	<1	<1			
Xylenes	2.1	<1			
MTBE	<10	<10			

Note: UIP = Unidentified Peaks TBQ = Trace Below Quantitation NI = Not Indicated



LENDYNE, INC.

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(802) 879-4333

JOB # 39841211

CHAIN-OF-CUSTODY RECORD

27212

Project Name: ARMAND AUTO Site Location: GEORGIA, VT	Reporting Address: GRIFFIN	Billing Address:
Endyne Project Number: GIAA1252	Company: Contact Name/Phone #: K. McGRATH	Sampler Name: ROB BASILE Phone #:

[illegible]

Relinquished by: Signature	<i>[Signature]</i>	Received by: Signature	<i>[Signature]</i>	Date/Time	6-17-98 11:15
Relinquished by: Signature	<i>[Signature]</i>	Received by: Signature	<i>[Signature]</i>	Date/Time	6/17 11:15

New York State Project: Yes ☐ No ☒

Requested Analyses

[illegible]